

The Claims

1. A process for producing a lumber type product from scrap carpet, comprising in combination:
5 shredding the scrap carpet;
grinding the shredded carpet;
heating the grinded carpet to a first predetermined temperature range;
heating the grinded carpet to a second predetermined temperature range which is
higher than the first predetermined temperature range; and
10 heating the grinded carpet to a third predetermined temperature range which is
higher than the second predetermined temperature range.
2. A process according to Claim 1, further including:
heating the grinded carpet to a fourth predetermined temperature range which is
15 higher than the third predetermined temperature range; and
heating the grinded carpet to a fifth predetermined temperature range which is
higher than the fourth predetermined temperature range.
3. A process according to Claim 2, wherein the first predetermined temperature
20 range is from about 205 to about 255 degrees Fahrenheit, the second
predetermined temperature range is from about 275 to about 310 degrees
Fahrenheit, the third temperature range is from about 340 to about 385 degrees
Fahrenheit, the fourth predetermined temperature range is from about 395 to
about 435 degrees Fahrenheit, and the fifth predetermined temperature range is
25 from about 430 to about 465 degrees Fahrenheit.

4. A process according to Claim 3, wherein grinding the shredded carpet comprises grinding the shredded carpet to pass through a one half inch screen and grinding the carpet a second time to pass through a screen of from about one fourth inch to about three eighths inch.

5
5. A process according to Claim 4, wherein the carpet has been substantially melted from heating, further including:
extruding the melted carpet into a mold; and
cooling the mold and the extruded melted carpet.

10
6. A process according to Claim 5, wherein cooling the mold and the extruded melted carpet comprises placing the mold into water and circulating the water.
7. A product manufactured according to the process of Claim 6.

15
8. A process according to Claim 2, wherein the first predetermined temperature range is from about 225 to about 245 degrees Fahrenheit, the second predetermined temperature range is from about 285 to about 305 degrees Fahrenheit, the third temperature range is from about 360 to about 380 degrees Fahrenheit, the fourth predetermined temperature range is from about 405 to about 425 degrees Fahrenheit, and the fifth predetermined temperature range is from about 435 to about 455 degrees Fahrenheit.

20
9. A process according to Claim 8, wherein grinding the shredded carpet comprises grinding the shredded carpet to pass through a one half inch screen and grinding the carpet a second time to pass through a screen of from about one fourth inch to about three eighths inch.

25

10. A process according to Claim 9, wherein the carpet has been substantially melted from heating, further including:
extruding the melted carpet into a mold; and
5 cooling the mold and the extruded melted carpet.
11. A process according to Claim 10, wherein cooling the mold and the extruded melted carpet comprises placing the mold into water and circulating the water.
- 10 12. A product manufactured according to the process of Claim 11.
13. A process according to Claim 1, wherein grinding the shredded carpet comprises grinding the shredded carpet to pass through a one half inch screen and grinding the carpet a second time to pass through a screen of from about one fourth inch to
15 about three eighths inch.
14. A process according to Claim 13, wherein the carpet has been substantially melted from heating, further including:
extruding the melted carpet into a mold; and
20 cooling the mold and the extruded melted carpet.
15. A process according to Claim 14, wherein cooling the mold and the extruded melted carpet comprises placing the mold into water and circulating the water.
- 25 16. A product manufactured according to the process of Claim 15.

17. A process for producing a lumber type product from scrap carpet, comprising in combination:
shredding the scrap carpet;
grinding the shredded carpet in a plurality of grinding stages;
5 heating the grinded carpet in a plurality of heating stages, wherein each succeeding heating stage heats the grinded carpet to a higher predetermined temperature range.
18. A process according to Claim 17, wherein grinding the shredded carpet
10 comprises grinding the shredded carpet to pass through a one half inch screen and grinding the carpet a second time to pass through a screen of from about one fourth inch to about three eighths inch.
19. A process according to Claim 18, wherein the carpet has been substantially
15 melted from heating, further including:
extruding the melted carpet into a mold; and
cooling the mold and the extruded melted carpet.
20. A process according to Claim 19, wherein cooling the mold and the extruded
20 melted carpet comprises placing the mold into water and circulating the water.
21. A process according to Claim 20 wherein the plurality of grinding stages
comprises a first grinding stage and a second grinding stage and wherein the
plurality of heating stages comprises at least three heating stages.

22. A process according to Claim 21 wherein the plurality of grinding stages comprises a first grinding stage and a second grinding stage and wherein the plurality of heating stages comprises at least three heating stages.
- 5 23. A product manufactured according to the process of Claim 22.